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CYPRIPEDIUM

1 PUBESCENS  
2 SPECTABILE





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JULY, 1887.

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FINANCIAL CAUSES, which it is not our purpose now to consider, and increase of population, have led to a great movement in the building of new residences within the last few years. This movement still continues, and is not confined to any particular State or region of country, but is very general in the thriving cities and villages all over the land. The present styles of building are much superior in pleasing and picturesque effects to the box-like forms that previously prevailed, and in connection with the growth of architectural taste there is a corresponding attention to the appearance of the surrounding grounds. As the improvement of the grounds is usually done by the owner himself, who is often lacking in the special information and skill necessary to perform it well, it happens that on most places many errors are made, both of omission and commission. Of the former, corrections can be made only by the growth of horticultural taste in the individual, or by giving the work of improvement into the hands of a trained and skilled gardener; but the mistakes that are ordinarily made may be avoided by almost any one by a little care and attention, and we propose to notice these mistakes at this time, and point out the proper course to take in arranging the grounds of new residences. The advantage in appearance which a house has

that stands up well above the level of the street or roadway, is now very generally understood, and consequently we find the foundation walls built higher than was customary some years ago. In order to increase the effect still more, it is now a very common practice in ordinary suburban lots to fill in soil sufficient to raise the surface a foot or two above the street, thus forming a terrace at the street line. We do not advise this practice for general adoption, but, in some cases, the peculiar circumstances make it desirable. Where the fall of the drainage is very slight, it is even necessary; where the grade of a street is lowered, and the grounds have already been planted, there is usually no other course but to terrace at the time. But a course that is necessary under the conditions named has been meaninglessly copied in many instances where there was no occasion for it, and we see the lots along whole lines of streets piled up sometimes as much as three feet or more above the general level, even where it is necessary to build within a few feet of the line, thus requiring the entrance to the house to be by a flight of eight or ten steps. On larger grounds where are built villas or residences of much pretension in style and finish, and which occupy a sufficiently elevated site, and at considerable distance from the street, this method of



grading up the front and terracing at the line is sometimes adopted, but the appearance is far less pleasing than an even grade over the whole surface; one effect is to shorten apparently the line of distance from the street to the house, and thus diminish the size of the grounds. A gentle and gradual rise from the street line to the front of the house is the handsomest surface a residence lot can present.

A nice piece of turf is properly considered the first requisite in fitting up the ground about the house, but to many people grass is grass; they never notice any difference in its quality, and never once consider that the smoothness and closeness of the turf depends on the quality of the grass. They will sow Timothy seed or Orchard Grass, or use the sweepings of some hay-loft. We have known persons to do all these things, and to do them with the utmost unconcern, unquestioning the result. Timothy is coarse and strong, Orchard Grass grows in tufts, and neither will make a smooth, close, velvety turf. To take the sweepings of a hay-loft is to take the seeds of several different kinds of grasses, and probably of a great variety of weeds, which, with their usual vigor of reproduction, will multiply in force, and prove a lasting annoyance. The only right course to take is to send to a responsible dealer for Lawn Grass, or Kentucky Blue Grass—either will make a good lawn.

Great mistakes are often made in laying out walks, by giving them all sorts of serpentine windings—lines devoid of both strength and beauty. For short distances, straight walks are always preferable, as being the most direct, and for long ones curves are admissible only for apparent reasons.

A new building is a sign the traveling tree-dealer does not fail to note; here he expects to do some of his best work. With commendable diligence he seeks the owner and makes his acquaintance. His knowledge of trees and plants, and his ability to give information in regard to them, is often surprising. Now, we have no hesitation in saying, do not take counsel with this man. Nine times out ten he cannot properly give you advice. If you know what you want it may possibly be to your advantage to purchase of

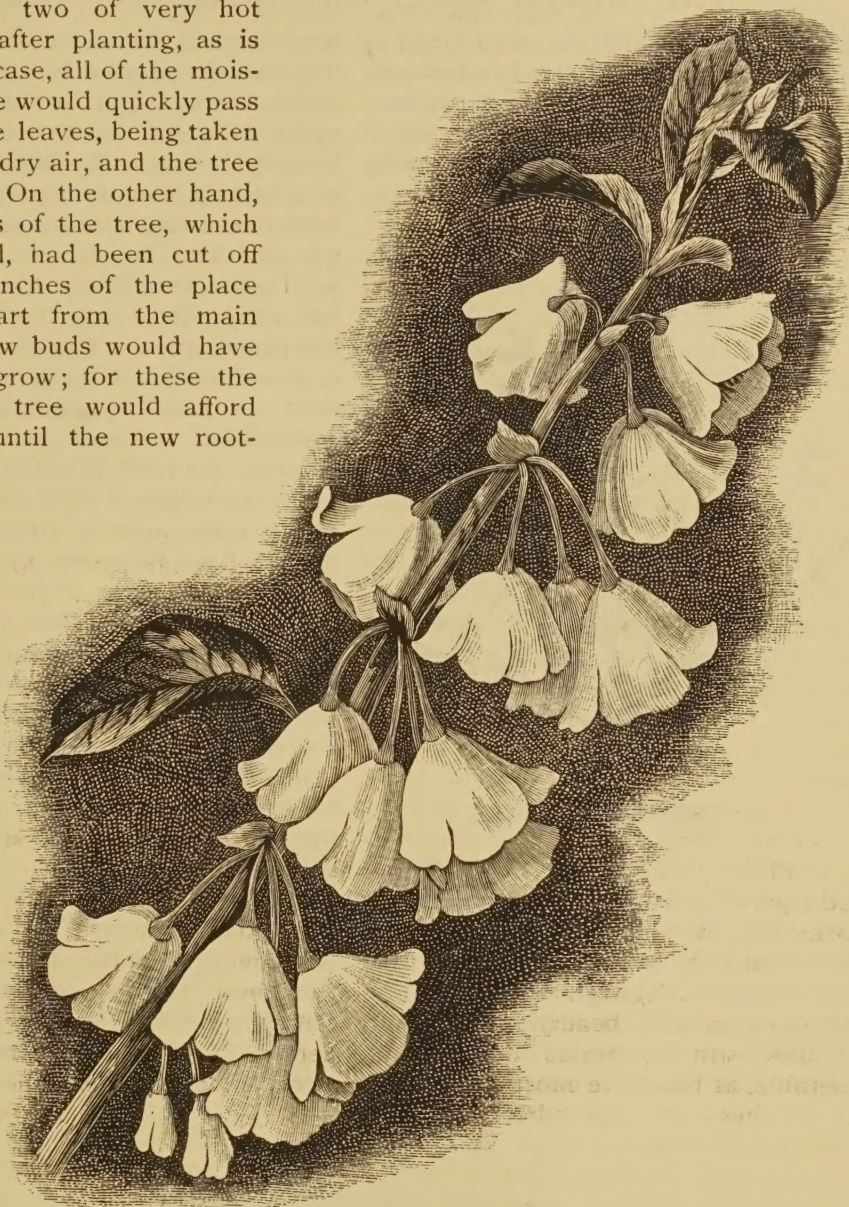
him, but do not look to him to inform you what to purchase. Neither should you give an order to one of these traveling men unless you have the best of proof that he is a recognized agent of a responsible house. The preferable way is to consult and order from a well known firm that has a reputation to maintain. You will find that you can get reliable advice and information from such a firm, if you choose to consult them by letter, and usually you can make purchases from them directly much more advantageously than in any other way.

With the desire to produce a fine effect as soon as possible, people want large trees, and are often willing to pay a much larger price for them than for those of ordinary size. This, for the most part, is a mistake. It may be that a large tree can be moved and transplanted, and that it will then go on in its growth apparently unchecked; but, as a rule, this is not the case. With the usual management in the removal and shipping of nursery trees there is seldom any gain by employing large trees, and often it is a decided disadvantage. This is true, both of deciduous and evergreen trees. Medium sized trees can usually be lifted with most of their roots, and will start vigorously into growth when transplanted, whereas when they have remained six or eight years in the nursery row, where they were first transplanted, they will have roots extending so far that they must of necessity be much reduced in removing, and this will give them a check which will require a long time to overcome.

A very serious mistake which inexperienced persons usually make in transplanting trees, is to set them out with all their branches on. The nurseryman sends them out in this manner, which is quite proper, as the growth the trees have made is the proof of their thriftiness. The branches may be long and well set, giving the head a handsome, symmetrical form; naturally one does not want to spoil this beauty, and it is planted with its branches perfect. As a result, it pushes into leaf, every bud starting a little shoot. It has at this stage all the leafage it would have had if it had been left undisturbed. But these numerous leaves demand an immediate and abundant supply of sap, which they do not



receive, as the rootlets have not yet formed; all the sap at their command is what is contained in the tree, and this must be divided between them to keep them alive until the roots begin their action. If the weather should continue moderately cool for a few weeks, the root-wounds will be partially repaired, young rootlets will put out and new sap begin to be formed, thus sustaining the life of the tree and allowing the many shoots to make a very little growth. If, however, there should be a week or two of very hot weather soon after planting, as is very often the case, all of the moisture in the tree would quickly pass out through the leaves, being taken up by the hot, dry air, and the tree would perish. On the other hand, if the branches of the tree, which form the head, had been cut off within a few inches of the place where they start from the main stem, only a few buds would have been left to grow; for these the body of the tree would afford sufficient sap until the new rootlets commenced to supply it, and then it would be abundant for their needs, and a few strong shoots would be the result of the season's growth. Gardeners and experienced planters understand this subject well enough, but it is not for them we are writing. To some this may seem like a thrice-told tale, but there are others that need these explanations, and



FLOWERING BRANCH OF THE SNOWDROP TREE.

they are given for their benefit. In a month or two at most the preparations for fall work in the garden must be concluded, and this is the time to consider them.

An error often made by the inexperienced, is planting in the sod. The desire is so great to have the turf of the lawn unbroken, that when trees are planted the sod is replaced close to the stem of the tree. This is wrong; a tree when well established will continue its growth in the sod, but when first planted the roots should have the full benefit of the soil without interference by the grass roots. A bed of rich, mellow ground, with its surface free from sod, at least three feet in diameter, should be provided for each tree or shrub to be set, and this space should be kept in this way for as much as three years.



If the common mistakes of the fruit, the flower and the vegetable garden should now be reviewed, it would make

a long chapter, and we therefore leave the subject at present for the reader's reflection.

### THE SILVER BELL, OR SNOWDROP TREE.

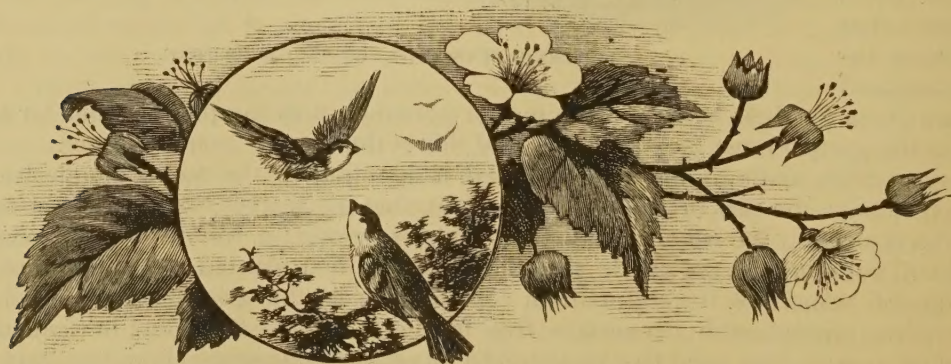
One of the rarest shrubs to be found in gardens is, also, one of the handsomest. This is *Halesia tetraptera*, or Snowdrop Tree, or, as sometimes called, the Silver Bell. It is a plant of shrub-like growth,



SNOWDROP TREE—HALESIA TETRAPTERA.

and when fully developed is from ten to twenty feet in height. It is a native of this country, growing south and west from Virginia. Though in its natural state it is only found at the south, yet it will bear well the climate of the north, and when in bloom is one of the finest

ornaments of the lawn and the shrubbery. The flowers appear in early spring, just as the leaves begin to come, and before many of them have developed. Our illustrations show the flowers of natural size, and the bush reduced, correctly representing its appearance at the blooming season. The flowers are snowy white and bear a very close resemblance to the Snowdrop, from which circumstance it has been named. The flowers are borne in clusters of two to four, and are pendent on slender pedicels. The plant commences to bloom when young, the one which is here figured being only two years transplanted from the nursery, and about three feet in height. After the flowers have fallen the shrub comes into full leaf and makes a fine bush through the whole season. The leaves are two to five inches in length and one to three inches wide, oval in form and downy beneath. The bush is easy to transplant and is apparently quite hardy in this climate. It will prove a valuable addition to any garden where it may be introduced. The generic name of the plant was given it in honor of S. HALES, an English writer on vegetable physiology of the last century. The specific name, *tetraptera*, meaning four-winged, is in reference to its four-winged seeds. Another species, *H. diptera*, also growing at the south, becomes a tree from twenty to fifty feet high.





## RUSSIAN PEARS AND NORTH-GERMAN CHERRIES.

If Apples have been difficult to grow successfully in the "cold North," much more has it seemed difficult to find Pears and stone fruits adapted to that large section of inhabited North America. And yet, as regards Plums and Cherries, the fact that perfectly iron-clad native species exist, and are abundantly distributed beyond the utmost northern boundary of the United States, and even the settled parts of Canada, has given good ground for hope that eventually the problem can be solved, if not otherwise, then, surely, by the improvement under cultivation and selection of these wild forms. But the Pear has everywhere shown itself less tolerant of extremes of temperature than the Apple, and thorough trials of all varieties thought to be most hardy have proved that none of the Pears of Western Europe, or their American seedlings, can be made to succeed north of what is getting to be known among fruit growers as the "Baldwin line."

The recent researches of Professor BUDD, of Iowa, and Mr. CHARLES GIBB, of Canada, among the fruit-growing districts of Northeastern Europe have revealed, to us in America, the fact that races (if not species) exist there of tree fruits possessing much greater resistance against cold than any before known to us. And yet the cold of Europe is, so to speak, of so different a texture from American cold that a mere thermometric comparison is not always a criterion sufficiently defined for our certain guidance. The same minimum temperature at low altitudes, especially if near the sea, does not seem to be so injurious to fruit trees as in higher and drier interior regions. For that reason we find that quite a number of the Russian Apples brought from sections of that country where the thermometric observations indicate cold quite as severe as that of the mountains of Northeastern Vermont, do not prove to be true iron-clads. In this particular they are like the Apples of the lower St. Lawrence valley, from Montreal down. Though grown successfully in that valley, considerably north of where I live, I cannot do much with them. With the thermometer indicating the same temperature, our drier atmosphere, and perhaps different elec-

trical conditions, seem to permit greater injury to the wood, which becomes much more discolored and disorganized in consequence, and the trees are soon rendered valueless.

I am already noticing this difference in the Russian Pears, many of which, brought from middle Russia, between latitudes  $50^{\circ}$  to  $65^{\circ}$  north, where a winter's cold of minus  $40^{\circ}$  to  $55^{\circ}$  Fahrenheit is often recorded, have their wood darkened by temperatures no more severe than the lower one named. But I find that this mere darkening of the wood is not so injurious to the Pear as to the Apple. In the Apple it is followed by decay; but in the Pear the devitalized wood takes on a hard, horn-like condition, which does not seem to impair the vigor of growth, and I hope will not affect their fruitfulness. The hardiest of our well known Pears in my grounds has been the Onondaga, or Swan's Orange. Its new wood is darkened even in our mildest winters; but the trees seemed thrifty, and I have grown them to bearing size without any evident external injury. But the winter of 1884-5 settled the business, exterminating every Pear on my place, along with the Ben Davis Apple, all root-grafted or low-budded trees of Fameuse, and many other semi-hardy Apples. That same winter I had out some dozen or more young Pear trees of the BUDD-GIBB importation, the upper branches of which were well above the snow. The wood showed discoloration in the spring, yet the terminal buds all started strongly, and the trees made a very fine growth. The earlier plantings now stand six to eight feet high, and the past winter, which has exceeded the average in severity, does not seem to have done more than cause a moderate discoloration in most of the varieties. There is a difference, however, in them, and a few are killed back a few inches. But I am glad to say that the two varieties which Messrs. B. and G. regard as most desirable, Bessemianka and Sapieganka, are among the hardiest. To these may be added Dula and Limonaya; but the "Bergamotte Common" is not so hardy as Onondaga, and the same may be said of varieties under the name of Gliva and Bezi de la Motte, received from Mr. GIBB.



Tonkavetka, called a culinary Pear, seems pretty hardy.

In growth, Bessemianka is a most beautiful tree, the limbs coming out symmetrically and curving upward equally, so as to give the young trees a candelabrum shape. Sapieganka, on the contrary, has a rugged growth, the limbs, supported by strong bosses at their origin, coming out at right angles to the trunk, only the upper ones showing a tendency to ascend. The petioles of this variety are quite red, so much so as to give a reddish tone to the foliage in mass. The leafage of all the Russian Pears is striking, being much like that of Le Conte and Keiffer, indicating Asiatic origin. All the American Pears I have tried here were more or less attacked in their foliage by fungi and insects, but that of the Russians is remarkably firm and healthy.

As to the North German Cherries, I have brought none to bearing yet, but

they all seem to be very nearly iron-clad, and fine growers. They are all of the Griotte or Mazzard class, but so different from the Mazzards of Eastern Europe as to be very distinct in tree and fruit, as the last is described. Many of them are said to approach the Heart Cherries in size and sweetness. Some of those I have are in our books, especially Brown Brussels and Griotte du Nord, which are grown in Belgium and France considerably, though I have never come across them in America. Double Natte and Ostheim are very promising, the latter, however, varying much and constituting a family rather than a distinct variety. I have not yet had the good fortune to get hold of specimens of the famous Vladimir family of Russian Cherries, nor of any of the Russian Plums, both of them quite distinct and peculiar species, according to the descriptions given.

T. H. HOSKINS, M. D., *Newport, Vt.*

### OLD-FASHIONED HERBS.

In the gardens of our grandmothers they occupied a prominent place and a useful one as well. In this day we, of a later generation, hardly know the names, much less the uses, to which each might be applied. And yet no garden ought to be complete without an addition so pretty as well as valuable. SHAKESPEARE has immortalized a few of them by most honorable mention, and writers of a later day have given due honor to their several uses. Here we note from one how fragrant teas were brewed from this or that, whose efficacy was quite potent. Another tells of the Sabbath church-going with the invariable sprig of Rosemary or Sweet Marjoram as an accompaniment. Then, too, we know full well how our dainty Lavender was prized as an aromatic herb most popular. The sweet, old-fashioned perfume steals up to us out of presses from which we draw forth the old linen of our ancestors, and it is of this last named we would write.

Several years ago, I sowed seeds in early spring of the Lavender, hoping to have it bloom the first year. But I found it only half matured with fine, large plants when winter set in. I then protected it as I do my Roses, fully expecting to find it in good condition in the spring. It

proved a hard winter, and when uncovered I found only frozen plants to reward me for my labor. But not discouraged, I again sowed seed, and in the fall took up the plants and put in the cellar and part in the house. It is claimed, I believe, that the herb is hardy, wintering over much as our Sage, and coming out in the spring with only a few frozen leaves, which soon give place to new ones, but if this will do in some places it will not do in the more severe climates of some of our States. The better plan is to remove the plants to the house or cellar. Mine, in a month or two, sickened in the house, and finding those in the cellar in good condition, I removed the house plants there and succeeded in wintering them over admirably. The plants were simply set in a box thickly, and had but little attention save water now and then, until in the early spring I removed to the garden beds where they soon took up the old plan of life where they had left off in the fall, and in early summer shot up the many and fragrant flower stems, the most valuable part of the herb. These should be cut when fully perfected, and laid on papers to dry. They will serve a double use. Either to lay, as did our grandmothers, between the



contents of the linen drawer, or to tie in pretty clusters with dainty ribbon, thus fastening upon cards a most valuable and appreciative gift at Christmas to flower-loving friends. Other uses we know for the fragrant Thyme, the sweet old Mar-

joram, the hardy Saffron and the useful Sage. All of these take care of themselves in winter, being quite hardy. Surely we were well paid for giving room to them, if only to enjoy their old-time fragrance and luxuriance. H. K.

### SMALL FRUIT CULTURE.



There are thousands of persons owning lots who purchase fruits of all kinds in their season, in large quantities, who may easily grow a large supply of such fruits as Raspberries, Strawberries, Currants, Gooseberries and Grapes, and have them fresh from the plants. Large quantities of fruit found in the market have to be picked before they are ripe in order to keep them in good condition for several days, or until a purchaser is found. They are, as a consequence, prematurely ripened, and never have the flavor of such as are left to fully mature on the plants. Strawberries picked and used right from the plant are worth a good deal more than those which have laid in the store for several days; so it may be said of all other soft fruits. If you have a plat twelve feet by twelve feet set out on it fifty Strawberry plants, keep the ground clear of weeds and the runners cut off, and if the ground has been fairly enriched, you can pick a bushel of fruit the following season. If you have another twelve by twelve plat, set out two dozen plants of Raspberries or Currants, and you shall be astonished at the amount of fruit you can pick the second season after planting. If you have not so much ground which you can use for this purpose, but have a spot three by three feet beside your coal house or any other outbuilding, then plant a Concord, Brighton, or Worden Grape vine, train it up over the building, and two years after planting, you shall begin to harvest some of the finest fruit earth produces. If there is a finer or healthier fruit than the Grape I have not had the privilege of seeing it. Therefore plant some kind of fruit, something that in its season you can enjoy, the true flavor of which has not been destroyed by being too long picked or picked before being ripe.

A few practical details may not be out of place for those who have had but little or no experience in raising small fruits. Any soil upon which water does not remain during winter, can be made to grow small fruits, in fact, any soil which will produce weeds will grow them; but as there are few soils which can produce two crops at the same time it is the better plan not to try to grow a crop of weeds and a crop of Strawberries on the same soil together.

The best manure for small fruits, and, in fact, for everything, is well rotted barn-



yard manure. If the plat is small the manure can be spaded in, if large, have it plowed; try and incorporate the manure through the soil as well as possible. The roots of all plants ramify through the soil in all directions in search of food, therefore, by mixing it thoroughly with the soil it is in a more convenient position for them to get it. If barnyard manure cannot be obtained, then bone dust will answer the purpose. Only apply to the surface after digging or plowing, and rake or harrow in.

Strawberries can be set out either in the fall or spring; if in the fall see that the plants are strong, well rooted and set out early enough to make good roots before freezing weather comes on. If the patch is small and has to be worked by hand, set the plants eighteen inches between the rows and fifteen inches between the plants. Keep all runners cut off, thus concentrating the strength of the plant in forming a strong crown, without which a good crop of fruit cannot be obtained.

The best varieties of Strawberries for general culture on all kinds of soil are the following, but, of course, there are some excellent kinds which appear of only local value, succeeding well only in particular sections and locations; such kinds are not very suitable for the inexperienced to begin with.

Cumberland Triumph; for family use this is an excellent berry. It is smooth, light scarlet in color, and continues bearing a long time.

Charles Downing; of superior quality, bright crimson, and medium early.

Manchester; an excellent berry, but being a pistillate variety, requires some staminate variety growing beside it. The fruit is large, rather late, of a bright scarlet color, and very productive.

Sharpless; probably one of the largest good Strawberries in cultivation, of excellent quality, very productive and a strong grower.

James Vick; upon some soils this is a wonderful berry for productiveness, in fact, it is too productive, setting more fruit than the strength of the plant can mature. It remains in bearing a long time, and is of fair quality.

Wilson's Albany; an early variety, very productive, and probably better known than any other in cultivation. Some growers claim that this variety has "run



out," and is not worthy of being cultivated, but this is all a mistake. The writer of this had a patch of Wilson's last year which produced as fine, if not better, fruit than he had ever had from it before. The soil and attention may get "run out" but the variety, if well grown, is just as good as ever it was.

As for Raspberries, if the place is small, let them be set three feet by three feet, and when only a few are grown tie up to wire or stakes. Cut out all old wood as soon as the fruit is all picked, thin out the young wood, and pinch out the points of



the young shoots to make them branch and keep them dwarf. Do not induce a too rampant growth by too heavy manuring, as well ripened, medium-sized shoots are the best for remaining uninjured during winter.

Tyler; this is similar to the Souhegan, but with me more productive; it is the earliest of the Black Caps, and very hardy.

Mammoth Cluster; is excellent for general culture. Large fruit, very productive, and a strong grower.

Gregg; is our best late, strong grower; fruit large, of excellent quality and very hardy.

Of red varieties the following are the best for general culture:

Cuthbert; a large, firm berry, very productive.

Marlboro; a new variety of great promise; fruit large, firm and productive.

Shaffer's Colossal; a strong-growing variety of excellent quality, hardy and very prolific, remains in bearing for a long time.

Where plenty of water can be had, a good watering of the Strawberry bed during a dry period increases the yield sometimes double, also a mulching with short grass or some similar material before the fruit ripens, not only prevents them from drying out rapidly, but also keeps the fruit clean.

Winter mulching is best put on after the ground has frozen firm enough to make everything solid; do not put on too much, enough to prevent rapid thawing and freezing is all that is necessary.

M. MILTON.

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## CALLA LILIES.

There is no flower for winter blooming that has received more attention than the Calla Lily, and, at the same time, has disappointed so often. As soon as the weather will permit it to be set out, the owner can be seen tugging it around to find a suitable place for it to rest during the summer months, previous to repotting for winter.

The Calla is fully able to take care of itself; all the rest it needs it will take in its own way and own time. Set it out and let it take its chances with other plants, but never water; if it gets wet with the rain it will be all right, and you will find that it will naturally die down. It may have one or two small leaves during the summer, as the Lily will live as long as there are roots to feed on, as it eats all the substance out of the roots, and you will find when you repot it that there is nothing left that were once roots but dried up, black-looking fibre.

In order to repot a Lily properly, empty it out of the pot entirely. The same soil can be used again, as the soil is only a substance through which the plant receives its living; the growing Lily depends on light, heat and water. Put into the pot the same soil mixed with the old roots and chopped up leaves; put as many leaves in the bottom of the pot as you can possibly pack in before putting in your soil, as decomposed vegetable mat-

ter is really better than animal matter, the latter will produce larger plants, but they seldom bloom when they grow so large, and if they do it will be only one flower during the winter, and that not until near spring. I have Lilies that have not had any dressing, that have grown just in common soil, with the pots set in bowls of water, and the stocks would not measure an inch and a half in circumference, and they have bloomed freely.

After you have finished potting, place the pot in a bowl of water or pan, one that will hold at least a half pint with the pot. This must be kept full of water, as the hot sun will soon dry out all moisture, which is very injurious to the plant at the first starting.

Now leave the Lily to take care of itself, and in the course of a week or two you will see it sprouting. The water that is drawn up through the soil by the rays of the sun on the surface of the soil passes through the leaves that have been placed in the bottom of the pot, and thus carries with it carbon gas that is so necessary to plant life. The more decomposed the leaves the more gas. As the leaves unfold they commence taking in carbon from the air, thus, you see, it has a double supply.

When the plant is taken into the house it must have a window where it can have the sun at least two hours a day, besides.



having a strong light. Keep the pan filled with hot water during the winter, in order to keep the soil heated; if the plant should not take up all the water during the day, empty it out and fill again with hot water; do this daily.

There is no reason why a Lily should not bloom, as nature has intended a flower for every plant in its own way, and if properly treated will bring satisfactory results.

I once called on a lady who showed me her plants. Among them was a fine Calla, and I knew by its appearance that it had not bloomed. I remarked:

"You have a fine Calla."

"Yes; I am very proud of my Calla," she replied.

"Has it bloomed?" I asked.

"Oh, no!" she exclaimed, looking very wise and at the same time very modest, "It is a he Lily."

I was greatly amused. If any of my readers have such an idea, just correct it at once, for there are no he Lilies. The male and female germs are contained within the same bulb. If you will examine carefully the spadix, you will find there both male and female flowers.

MISS HOOPER.

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## FOREIGN FRUIT HONEY.

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The tourist's breakfast at a Swiss forest inn, is incomplete without honey, as even the stay-at-home reader is aware, if he reads English novels and letters of travel discerningly. He does not know, however, that the increase of foreign travel has taxed the resources of the bees so heavily that the shrewd Swiss hotel keeper cunningly devises a fruit honey which takes its place, so that the traditional mountain breakfast is not wanting. No one need quarrel with the substitute, which is thick, golden and full in flavor as that from the combs, although it comes from the orchard boughs and not from the hive. The honey of Hymettus is not more poetical than the luscious, glassy syrup drawn from ripest Pears.

I had been reading of the Swiss Pear honey and the ambition seized me to attempt something of the kind at home. The baskets of glowing Sheldon Pears in the pantry were a picture, but a vanishing one, as they were melting with ripeness. Three quarts of Pear juice were soon simmering in the stone pot in the oven. All night they slowly reduced, and in the forenoon an hour's boiling brought them to a syrup or honey which surpassed all expectations. The three quarts of Pear juice yielded nearly a quart of delicious honey, pale, clear, sweet, with a fruity flavor, which I won't call an improvement on that from the hives, but is an agreeable variety from it. Early Pears are very rich in sugar, and it may be profitable to fix their transient sweetness in this way. It has kept three months

from the making, unsealed, and the flavor is even better than at first. It was clarified by straining the juice first through linen cheese cloth, then through flannel and removing a few spoonfuls of froth in boiling. Not a grain of sugar was put in. The honey is the pure juice and sweetness of the fruit. This Pear honey comes in very nicely at the close of summer, and furnishes one of those stand-bys of the store closet which are such great helps to the housekeeper, who likes to keep up a good table. An American breakfast in autumn, with delicate Adirondack griddle cakes, or the first Buckwheat cakes and Pear honey finishes very nicely. I do like to see people eat with relish and thankfulness all the good things of the season as time caters for for us with change and variety. It is discouraging to a housekeeper who takes pride in her business, to sit down at table with a lot of people who are too careless of their health to have an appetite, and must pick a trifle here, and deny themselves there, for fear of disagreements, and eat in an arid toast-and-egg fashion the year round.

Those fond of experiments will fancy a favorite German preserve which is as standard in Germany as jam with the English housekeeper, marmalade for the Scotch one, or canned Peaches for the American. In wine making time, Grape juice taken fresh from the press is boiled down to a syrup, when all sorts of fruit is cut up and thrown into it to boil into a high flavored marmalade. You can



imagine how it tastes, with Pears, Quinces, Plums, Mulberries, Apricots, and even young Carrots, blended indistinguishably, but it is very relishing, either with roast meats or as a preserve. German ladies make it by the firkin, for keeping well is not the least of its good qualities. In

Grape regions it will be worth while to use part of the Grapes in this way rather than waste them in making poor wine. This Grape jam is very wholesome, and liver troubles and scorbutic diseases disappear where it is liberally used.

SUSAN POWER.

### AN UNAPPRECIATED BEAUTY.

Among the modest little beauties with which I fell in love at first sight, years ago, was the low-growing Lobelia, L. erinus and its varieties, and my observation all around, from the large green-houses to private gardens and windows, shows that it is grown but very little, either from want of appreciation or because of non-acquaintance with its virtues.

Two years ago I got a packet of mixed Lobelia seed and one of Sweet Alyssum, and having a device on my cemetery lot in which I wished to cultivate a sort of cushion mass, I planted the two mixed together, and in a few weeks the mass of soft, delicate green began to be dotted with the sweet white tufts of the Alyssum and the delicate florets of the Lobelia in all shades of blue, pink and white. In midsummer and autumn, till frost destroyed it, there was a mass of the mingled, delicate flowers covering the device and hanging gracefully over the edges, which attracted and delighted everybody who beheld it. I had one solitary plant of it that was self-sown among the Lycopodium in a large pot,

and all summer, and especially all the past winter, in our window garden, that one plant has been literally a mass of delicate blue bloom among the mass of the moss and hanging over the edge of the pot.

Besides its beauty, the Lobelia is of the easiest culture. A plant or two or three in a large pot with a Geranium, Calla, or other plant will thrive and add much to the attractiveness of the window or conservatory. It makes an admirable hanging basket, either by itself or mixed with Alyssum or other plants. For the delicate trailing attachments to a bouquet that set off a vase of flowers to perfection a few sprays of Lobelia are unsurpassed.

Some other time I may give the readers of this precious MAGAZINE the benefit of extended observations and experience with other members of the floral kingdom, if the editor finds what I have to say is worthy of any other place than his capacious waste basket

THEO. H. MACK, *Sterling, Ill.*

[It is a pleasure to lay before our readers such practical observations and experiences as the above, and they are always welcome.—ED

### MUSHROOMS.

When it was known that "Old BROWN" had got the head gardener's place, at Sandheys, where I was first foreman, I received a vast amount of chaffing and commiseration by those of my friends in the gardens around who knew my fastidiousness, and were acquainted with Old BROWN's hobby, and until he came (I was acting as head gardener for a fortnight, although only seventeen years,) one or another would drop in and say, "Well, WILL, I'm sorry for you old fellow. BROWN is never happy but when he has his nose stuck in a heap of Mushroom compost." "Oh, that's all right," I would answer, "he may stick his head

in, so long as he don't want me to follow his example." "Ah," they would reply, "there's the rub; that's where the fun comes in. He will want you to do just that." I had heard Old BROWN's spawn praised all over the country side, one nurseryman giving it a place in his catalogue at an advanced price on the best London, and he also had the reputation of being a very successful grower of this nutritious fungi, and as while under him I made hundreds of bricks according to his *modus operandi*, and also raised some tons of Mushrooms, I thought I would send a few lines to our beloved MAGAZINE, on spawn-making and growing Mushrooms.



In making spawn bricks you want the germs to develop so far and no farther, therefore you don't want too much ammonia in the manure used for this purpose. Our mixture generally used to be half stable droppings, with some short straw left in, and the other half loam and cow manure in equal parts, the whole mixed into a moldable paste with water. When molded into bricks, the sides and ends of any small box being used, they are set in the sun and turned as required, so as to dry equally, and when firm enough to just pierce them without hurting the thumb, we made holes three-parts of the way through at the ends, filled the cavity with the best spawn we could get to within half an inch of the surface, and stopping up the remainder with the compost taken out. They were then placed in a warm room, one on the other loosely, so as to allow a free circulation of heat through the entire mass, covered over with sacks to exclude light, and left for the spawn to run. In a very few days the spawn would appear at the outside of the brick in blotches, and as soon as this milky appearance covered the whole brick the process of running, or germ-growing, was checked by their removal into a dry, cool house; if not removed at that stage the spawn assumes an appearance of whitish strings, and is not much good, as it is too far advanced to keep long. So much for the spawn.

In making a Mushroom bed, you want to keep all the ammonia in the manure, if you possibly can, for on this gas depends the fruitfulness of your bed; nitrogen is not more essential. Therefore your droppings must be kept in a shed and turned over every day to keep them from heating until you have sufficient to make your bed, which should be at least ten inches in depth, and as large as you like.

When you have collected sufficient whether your bed is a cracker box in a corner of the cellar, or a larger affair in a house heated and constructed for the purpose, mix the whole mass with a little good soil, put it in place in layers, beating it as firmly as possible, you can't have it too firm, leave it until the heat is about 80°. Then spawn, putting in pieces as large as a Walnut, about every six inches all over the bed. Put on two inches of good loam, beat everything firm and snug, cover carefully from light with clean hay, and leave it alone for a week or two. By this time you will be able to see the spawn breaking in patches all over the bed, and in another two weeks may begin to give a gentle sprinkling of water every few days, and I believe you will soon be carrying in handfuls, hatfuls, basketfuls of Mushrooms, according to the size of the bed and the intelligent carrying out of my directions.

W. H. WADDINGTON.

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### NATIVE HYDRANGEAS.

Here, in the South, we have two native shrubs which, I think, the readers of the MAGAZINE may be interested in as I am, since they belong to our native flora. The first to be noticed is the climbing American Hydrangea, botanically, *Decumaria barbara*, allied to the Philadelphia, and so similar to that Japanese climbing Hydrangea, introduced some eight years since by PETER HENDERSON, as a rare novelty, *Schizophragma hydrangeoides*, that I wonder it has not been taken hold of as being every way as good, with the merit of being at home in our own country.

I was out, last spring, in the flowering time of this *Decumaria*, and noted, with keenest interest and admiration, trees, yes, trees, whose trunks were two feet

in diameter, and for twenty feet high they were covered with these tenaciously clinging vines, with topmost limbs crowned with a luxuriant growth, with every twig terminated with its sweet-scented flowers.

In all my floral readings I have seen but one instance reported where the Japanese *Schizophragma* has succeeded in this country, and that in Massachusetts. *Hydrangea nivea*, unlike the above, is an erect shrub, somewhat in nature of growth of the exotic species, *H. Hortensis*, but more like *H. grandiflora*, (?) a hardy out door shrub. Last June it was my good fortune to find a shady hillside, of not over forty feet surface, where grew over a dozen of this attractive species, bold, handsome shrubs.



These flowers are a greenish white, with a delicate lace-like beauty entirely unlike the cultivated variety, Thos. Hogg, &c. Somewhere I have read that those large flowers are sterile and are abnormally developed. In the *Hydrangea nivea* these flowers are not numerous, and are interspersed among the fertile flowers so gracefully that it rather adds to its at-

tractiveness than otherwise. Both of the plants mentioned grow on the rich, damp soil of the lands which adjoin our numerous water courses.

I know the climbing kind grows as far north as New Jersey, but think it is only found in some five Southern States, South Carolina amongst them.

MRS. J. S. R. T., *Spartanburg, S. C.*

### THUNBERGIA ALATA.

The winged *Thunbergia*, *Thunbergia alata*, is a very pretty half-hardy annual, belonging to the natural order Acanthaceæ. It is a native of the Island of Zanzibar, in the East Indies, whence it was introduced by Mr. BARCLAY, of Bury Hill, England, in 1823. It is a twining or climbing plant, whose slender stems are thickly covered with soft, white hairs, the heart-shaped, pubescent leaves being of a bright green color.

The flowers, which are produced in the greatest profusion, spring from the axils of the leaves, and are of a bright orange-yellow color, the interior of the tube being dark purple, forming a decided contrast with the orange-yellow of the expanded limb of the corolla. It is a plant of rapid growth, if given a deep, well enriched soil and copious waterings during seasons of drought. It will, with a little care and attention as to training, cover a space of four feet in breadth by ten in height, and will continue to bloom from early in June until destroyed by frost.

This *Thunbergia* is a plant easily cultivated, and is increased by seeds, which are very freely produced. They should be sown about the middle of March, in a

well drained pot or pan filled with light loamy soil, and given a warm, moist situation as close to the glass as possible. As soon as the young plants are strong enough to handle, they should be transferred into three-inch pots, and grown on until the weather becomes warm and settled, when they can be removed to the open air. It occasionally happens that during our hot, dry summer weather the plants become infested with the red spider; as soon as these pests are noticed the plants should be freely and frequently syringed until the insects are destroyed.

This *Thunbergia* is occasionally recommended as a climber for the greenhouse or window garden, but on account of its being so subject to insect pests, I would not advise any one to use it for that purpose. It is sometimes used for bedding purposes, the plants being allowed to trail on the ground. Grown in this way it is by some much admired, but to me the plants look far prettier when grown on a trellis.

The generic name was given in honor of CHARLES P. THUNBERG, a celebrated botanist and traveler.

CHAS. E. PARNELL, *Queens, N. Y.*





## FOREIGN NOTES.

### SOME USEFUL PLANTS.

*Sedum spectabile*. This is a plant that is attractive alike in leaf and bloom. It is perfectly hardy, and about the month of July, when it will be eighteen or twenty inches high, each stem will be purple or rose color, and will remain in good condition for over two months. It is exceedingly effective as a mass or row in beds or borders, and is increased by division of the old roots. This should be done before the season is too far advanced.

Tuberous Begonias. I hear from the superintendent of a London park as well as from a noted flower gardener in Scotland that these are the coming plants for flower garden decoration, and they are most excellent subjects, but it would be a pity if they ever become as common as *Pelargoniums* have been. Tuberous Begonias might be grown in thousands of instances where they are still unknown before they would predominate, and no harm can result from advancing their culture in every garden, as they can be kept from year to year. This is greatly in their favor, and although they are somewhat late in the summer in becoming effective, yet they are exceedingly showy and very attractive during the autumn months. As they are generally regarded as greenhouse plants, some people may think that they would soon wither in the autumn, but this is not the case, as they are amongst the last plants in the flower garden to cease blooming. Bulbs are somewhat expensive to buy, but from a small packet of seed a good stock may soon be raised. Seed sown this season will produce bulbs that will make a fine display next year.

Pyrethrums. It is only within recent years that these have become popular, as their huge double and single daisy-like flowers charm all who see them, presenting as they do such a variety of soft and telling colors. It is no use to plant them singly, but an entire bed or beds of them will prove satisfactory in all gardens. They delight in a rich deep soil, and the flowers bear cutting admirably; indeed, it is a mistake to allow any old flower to

remain on the plants, as these impede the formation and development of fresh ones. They are easily raised from seed sown in the open at this time, and useful plants which may be used for immediate effect may be purchased at a cheap rate.

Lantanas. These vie with Verbenas in the form of their flowers and gorgeous colors, and they do not possess that objectionable habit of dying off prematurely so often experienced in Verbenas. The flowers have a rather disagreeable smell, but this does not prevent them from making a grand display in the flower garden. They are not so hardy as the preceding plants, and must be reared under glass, but a few of them are a fine addition to the flower beds.

J. MUIR, in *The Garden*.

### TWO FINE ROSES.

The year 1882 witnessed the distribution of several first-class novelties, including Bennett's two Hybrid Perpetuals, Heinrich Schultheis and Lady Mary Fitzwilliam. The first is a vigorous growing variety, producing very large flowers of a pleasing fresh rose color, and quite distinct from anything else. As early as 1884 it had attained the position of eighty-sixth in the list of the hundred Hybrid Perpetuals most successfully exhibited during that year, while last season (1886) it appeared as twenty-ninth in the list of the sixty-nine Hybrid Perpetuals that were most frequently staged on the winning stands at the South Kensington exhibition of the National Rose Society. Heinrich Schultheis is a very fragrant Rose and perpetual, though the autumn blooms are often not very characteristic.

Lady Mary Fitzwilliam is a magnificent Rose, and were it only a little more vigorous it might fairly be described as the finest Rose—bar *Maréchal Niel*—in cultivation. It is certainly the finest Rose of its color, surpassing both in form and size *Captain Christy*, *Duchesse de Valombrosa*, and similar light colored Hybrid Perpetuals. Its habit of growth is of the *Victor Verdier* type, but rather more thorny, and though the growth is



not very free, yet every shoot carries bloom both summer and autumn, and, practically, every bloom is fit for exhibition.

When at its best it is the perfection of form, with a high pointed center, surrounded by large petals almost white at their edges and shading to a rosy flesh at the base of the flower. Ninety-sixth in the 1884 list above referred to, Lady Mary Fitzwilliam last season came out ninth of the sixty-nine Hybrid Perpetuals staged on winning stands at South Kensington, being thus handsomely included among the twelve Hybrid Perpetuals most highly esteemed by exhibitors, while a bloom of it on one occasion certainly, if not more, was selected as the best Hybrid Perpetual in the show.

T. W. G., in *The Garden*.

#### SUMMER-PRUNING CURRANTS.

Those who have not yet given the plan of summer pruning or pinching out the growing tops from Currant bushes a trial should do so without delay, as it is while in the full flush of growth that the operation must be done to be successful, for if not done until the wood gets hard and requires cutting it had better be left altogether, as by that time the under leaves will have been so blanched by the dense top growth that they will fall off when fully exposed. We go over our bushes directly the leading shoots are about six inches long and pinch the tops out; the lower leaves then get strong and remain on the bushes all the season, and the buds at their base get very much stronger than if all the strength were allowed to rush up into the wood, which at the winter pruning will be cut off. There is really very little winter pruning to do if summer pruning or pinching is attended to, as the young wood that is left gets so completely covered with flower buds that one is loth to cut any of it away. Red and White Currants are apparently the most benefitted by close pruning, but Black varieties are also much improved by stopping the leading shoots that are as high as they are intended to be left for fruiting, the young growths from the base for supplying new fruit-bearing shoots being left intact. It is simply a question of concentrating the forces of the bush on fruit or useless wood production.

J. G., in *The Garden*.

#### FREESIA REFRACTA ALBA.

At one time this was considered a difficult bulb to grow, and its specific name was thought to be in reference to its refractory character. It has, however, proved itself amenable to culture, and this season I have had it very fine. They were planted six in a five-inch pot, and the plants grew to from fifteen inches to eighteen inches high, and although each bulb threw up only one flowering stem, yet this had four flowering shoots, and so vigorous were they, that this observation was made concerning them—that the pots were too crowded with bloom. As I know some people still complain of a difficulty in growing them, I may say that I believe one element of success is to thoroughly roast the bulbs after the flowering season is over. I place the pots on a top shelf near the glass, and leave them there until thoroughly dried off; they are then removed and laid under the stage until the time for potting comes round; but had I the convenience for doing so, I should keep them in the same place all summer. They seed freely, and if it is wished to save seed they must be treated differently—water must not be withheld, and they must not be placed in quite so warm a position. It is very satisfactory to find that this most fragrant flower is so easily managed, for, both for its beauty and perfume, it is invaluable for cutting.

DELTA, in *The Garden*.

#### CHIONODOXA LUCILIÆ.

The comparative merits of this plant and *Scilla sibirica* have been discussed from time to time, and while fully aware that the opinion of the majority is in favor of the newer introduction, under certain conditions I should give the preference to the *Scilla*. As bearing on the point I may mention that we grow them both here under exactly the same conditions in rather an exposed spot; and though the *Chionodoxa* flower just as freely as the other, they do not resist the strong cutting winds so successfully. This is owing to the weak flower stalks of the *Chionodoxa*, which during windy weather sway about in such a manner that the flowers are often severely bruised, while the stout, sturdy habit of the *Scilla* enables it to bear these wintry blasts with impunity. Where as extensive a display



as possible is needed for a small outlay, the cheapness of the Scilla compared with the other is also a consideration. The Scilla, too, can be forced into bloom by Christmas, but I have not yet succeeded in inducing the Chionodoxa to flower so early. H. P., in *The Garden*.

#### SOOT FOR GREEN-FLY.

Last year while waiting for tobacco powder, which has hitherto been considered the orthodox destructive of aphides on the tops of Chrysanthemums at this time of the year, I was curious to try the effect of dusting them with dry soot. I am particular in noting that the soot must be dry and finely powdered. To my great satisfaction it proved instant death to the green flies, without doing the Chrysanthemums any apparent injury. This year, so far, I have used it more largely in the same way, especially with Lilies. If used dry it will not even soil the fingers, and can be washed or syringed off in an hour afterwards. It has the advantage also of being a manurial agent, and for the Chrysanthemum is almost indispensable, giving that brilliant healthy glossy green color to the foliage so much admired. Dry soot direct from the chimney is very acrid and pungent, and in the case of young succulent Chrysanthemum shoots it would be advisable, should your readers try it in this way, to have the plants dry. Not even the fingers need be soiled if a small tin duster is used, but the soot to be of any use this way must not be kept where it can ab-

sorb moisture or get wet, which it is pretty sure to do in any glass structure. Those who have not hitherto tried this had better only use it with a plant or two and observe the results.

W. J. M., in *Journal of Horticulture*.

#### RINGING VINES.

One of the ablest of French horticultural writers, E. A. CARRIÈRE, in an article of considerable length, in a late number of the *Revue Horticole*, gives an account of the process which is commonly known among us as "ringing the vine." He also states the physiological theory upon which the practice is based, and the facts in regard to the results that follow the operation. At the close of the article the writer concludes that "ringing" is a useful operation that may be applied with advantage on a large scale in the vineyard.

As to the affirmation of certain authors, remarks the writer, that the annular incision, or "ringing," hinders the coloring of the Grapes, and that it is injurious to the quality of the wine, these are assertions without proof, and, he observes, the first assertion is contrary to the truth; as to the second, that the ringing injures the quality of the wine, it is one of pure presumption, entirely without support, and which probably has the facts against it. For if, as one cannot deny without going against the evidence, that the ringing advances the fruit at least eight days, this, in itself, is a favorable condition of a kind to produce better wine.



"MAY I GET IN, TOO?"



## PLEASANT GOSSIP.

### VARIOUS QUESTIONS.

1. Would a Wistaria do well at the northwest end of a veranda that faces north?

2. What is the best situation for Akebia? Mine is on an arbor that stands on the east side of the house. It was planted three years ago, and its longest shoots are not three feet. Would you think it best to move it to the east, west or north of the veranda?

3. I thought of putting Clematis Jackmani at the east corner of the veranda, and train it across the front. Would that be the best place for it, or would you advise it planted at the west end?

4. Would it hurt a white Lilac to have the top cut off so that it would only be three or four feet high. It now stands eight or ten feet high, and it is inconvenient to gather the blossoms. If you think it will not hurt it, please tell me when would be the best time to have it done.

5. When is the proper time to put ashes around Peach trees, or does it make any difference?

6. When should salt be put around the Quince tree?

7. How am I to know how strong to use white Hellebore tea, also, how strong to use whale oil soap for slugs on the Rose bushes?

SUBSCRIBER, *London, Ohio.*

1. At London, Central Ohio, a Wistaria would probably succeed with the exposure named, if other conditions are favorable.

2. Instead of moving the Akebia it would be better to enrich the soil about it for several feet in all directions. Some good old manure can be dug into the soil.

3. The situation named would be favorable for the Clematis.

4. The Lilac, if cut, would soon again reach its natural height, it could not be kept down permanently, and we should not advise it. The proper time to cut it back, if it should be done, would be when it is not in leaf.

5. Ashes can be placed about the stems of Peach trees at any time. The soil should be removed for several inches in depth, and the trunk of the tree examined for borers, killing them by means of a wire which can be thrust into the holes. Afterwards, place the ashes about the tree.

6. Salt at the rate of about a quart to each tree is recommended by some cultivators of the Quince. It can be applied to advantage this month.

7. Hellebore is sometimes mixed in

water in order to distribute it better, and especially to enable one to throw it against the under side of the Currant and Gooseberry leaves, where the worms are apt to be feeding. A small quantity of Hellebore left on each leaf is sufficient and one must mix it with this end in view; but more or less will make but little difference. The usual mode of application is to dredge it on as a dry powder when the dew is on the foliage, or after giving the bushes a sprinkling of water. One pound of whale oil soap to eight gallons of water is the best proportion.

### DOUBLE FLOWERED GLOXINIA.

I send you, by this morning's mail, a seedling Gloxinia blossom. It comes very near being double, and is quite a curiosity to me and all of my neighbors that have seen it. There will be only four blossoms on the plant, but they will all be the same. I never heard of a double one before, so I thought I would ask you if it was any thing new or not, and I would like to have you answer through the MAGAZINE.

MRS. A. B., *Collins Centre, N. Y.*

The engraving herewith, correctly represents the form of the Gloxinia bloom



DOUBLE GLOXINIA BLOOM.

described above. It is the first one of the kind we have seen, though we understand that such blooms occasionally appear, and those who are engaged extensively in raising seedling Gloxinias are familiar with this form of partial duplication.



**WATER LILIES—AMARYLLIS.**

Last March I planted some seeds of *Nymphaea odorata* in an aquarium. The water gets very stagnant in spite of frequent changes I make of it, and I wish to know if it will injure the young plants, also, if they will bloom this year.

I have some bulbs of *Amaryllis Regina* and *A. longiflora*, which I have been taking up every fall and storing for the winter, in the same manner as *Gladioli*, and then setting out again in spring; but they do not bloom, what is the cause?

A. N. P., *Arcola, Ill.*

Some charcoal can be placed in the aquarium, and this will tend to purify the water; if the water is changed frequently it cannot become so impure as to be harmful in any way. Seedling Water Lilies grown in an aquarium will probably not be strong enough to bloom the first season.

The *Amaryllis* bulbs can be kept in pots through the summer, not planted out. In the fall check the watering, and in time allow it to cease altogether. By November the bulbs should be at rest, and afterwards be allowed to remain so until February. Then they can be repotted in soil consisting of fresh loam three parts, and one part each of leaf-mold, sand and rotted manure. Water lightly at first and until growth commences, after which the quantity should be increased.

**BOUVARDIAS.**

I would like to ask about the house treatment of *Bouvardias*. Can they be trained to a bushy form? When should they bloom? Is it best to start new plants each year, or are the old ones better? Do they require any trimming after flowering, or at any time? What is the best method of propagation? Do they like rich soil? Do they like much room and watering freely?

How is the Climbing *Asparagus* propagated? Does it require any period of rest? What should be done with it in summer?

MRS. A. A. CHAPIN.

Instead of answering separately each of the above questions in regard to *Bouvardias*, we will say that the *Bouvardia* is a very beautiful winter blooming plant. The plants are best raised from cuttings made early in spring. The cuttings root readily, and by the time the weather is fine the young plants will be several inches in height and well rooted. They can then be planted out in a rich spot in the garden and be left for the summer. The ends of the shoots can be pinched occasionally to cause them to branch. Early in September the plants can be lifted and potted in six or eight-inch pots, with a soil composed of decayed sods, some sand, and a good quantity of old

manure well mixed together. As soon as potted set the plants in the shade, give them water and syringe the foliage. They can now, for a time, be kept in a cold-frame, or be taken directly to the house, placed in a good light, and where they will have a heat of 50° to 65°. After the blooming season is past keep the plants in a cool place and give but little water. By the middle of spring repot them in good, fresh soil, such as already described, cut back the tops and give them a warm place, and they will start into a new growth. Supply them with the water they need. When the weather is suitable plunge the pots in the open ground and leave them until fall, giving the necessary attention to water, and then remove them to the house again for blooming. We prefer not to keep the plants after the second season of bloom.

The Climbing *Asparagus* can be increased by division of the roots and by cuttings. Plunge the pot in the open border for the summer season. In the fall shift the plant into a larger pot and give some fresh soil.

**MARECHAL NIEL ROSE.**

Will you kindly tell me, through your July MAGAZINE, what to do to my *Marechal Niel Rose* to make it bloom? It is almost three years old, and is over six feet high. I kept it in the greenhouse last winter. This spring I took it out and put fresh earth in the box without disturbing the roots. It sends out new shoots and looks healthy, but it has never had but one bud, and that was last summer. I have used liquid manure all spring twice a week.

MRS. M. J. P., *Paducah, Ky.*

The best course with this plant is to dig a good spot in the greenhouse and make it rich, and plant it there to remain permanently. It can be set near the back wall, or at the side of the house, where the roots will eventually find their way to the soil outside. Train the branches up overhead to the rafters. It wants root room and branch room, and will then bloom satisfactorily.

**FUCHSIAS.**

One of your correspondents wants to know what soil to use for *Fuchsias*. I use leaf-mold, and for a fertilizer guano water once a week. The single varieties I use for winter blooming, and never train them, but let them hang over the pots. They are a mass of bloom from fall till spring; foliage sprinkled every day. S. L. H., *Smithtown Branch, N. Y.*



**AZALEAS.**

I would like some instruction about the care and culture of the Azalea. 1st, How are they propagated? 2d, How old must they be before they bloom? 3d, How often do they need transplanting, and what time in the year is best? 4th, What soil do they require, and what growth will they attain? 5th, Do they need to be cut back, and how long lived are they?

MRS. A. F. M., *Sycamore, Ill.*

In answer to the above inquiries, we copy the following instructions from the last edition of VICK'S FLOWER AND VEGETABLE GARDEN:

The Azaleas are found in this country and Asia. The favorite greenhouse sorts are varieties of the Chinese Azalea, A.



Indica. The plants are raised mostly from cuttings, except new varieties, which come from hybridized seed. Though thriving best in the greenhouse, yet with attention they may be successfully raised in the house. In the window garden the Azalea should have a southern exposure, with plenty of fresh air, and not be overheated. Regular watering is one of the main conditions. It is not necessary to water every day, but never let the plants get entirely dry, especially when flowering. Daily sprinkling of the leaves is also beneficial, unless the plants show flower buds. During the time of flowering the plant should be given the coolest place, as the flowers will keep three or four days longer in a low temperature. The flowers are both single and double, and are from two to three inches in diameter, of a great variety of colors. The plant is covered with flowers from January until April. After flowering the seed-pods will commence to form, and these should be cut off, and the plant prepared for transplanting by trimming. In transplanting remove the plant from the old pot without disturbing the roots. If the soil at this time is too dry, water it

thoroughly, so that the plant can be lifted with the ball of earth. One size larger pot is sufficient, and it should have some pieces of broken pots or charcoal for drainage at the bottom. Peat mixed with sand is the soil used for Azaleas. After transplanting the plant should be kept in a very cool room, but with plenty of light and sunshine. The daily sprinkling of the leaves must be resumed. Those who would like to take cuttings should improve the opportunity at the time of transplanting, and the cuttings, with a little care, can be easily rooted in sand under glass. During the summer months, or as soon as night frosts are over, the plant in the pot may be plunged in the open ground in an airy and sunny place. Water should be given the plant as needed, and on hot days this will be at least twice, morning and evening. A few weeks before removing the plant to the house, liquid manure may be supplied twice a week.

**MOON FLOWER.**

Are the vines of the Moon Flower annuals, and what treatment to give them? S. L. H.

The Moon Flower, *Ipomœa Bona-Nox*, is usually considered an annual, and is so treated, being raised from seed each year. It has a fleshy root, from which it might be inferred that, in a tropical climate, of which it is a native, it might be able to live over from year to year. The best botanical authorities within our reach, Dr. GRAY among the rest, are silent on this point.

**AUCTION BULBS.**

Last fall, I bought at an auction room, among other things, a dozen *Chrysolora* Tulips, and I watched, this spring, with considerable interest for the unfolding of their golden cups. But imagine my disgust at having a dozen twistical and unhealthy looking green abortions. The foliage is large and healthy, and the attempted blossoms are of full size. Can you tell me the cause of this freak, in the communication columns of your MAGAZINE.

G. E. F., *St. John, N. B.*

The variety *Chrysolora* is one of the finest of yellow Tulips, consequently in good demand. It may have been sold out of the stock of bulbs mentioned, and as, possibly, it was supposed that this variety would add to the desirability of the stock, and thus make it sell more readily, its place may have been supplied with a quantity of some worthless kind and labeled as *Chrysolora*. This is not an



improbable explanation, as it is a common trick. When one buys bulbs or dormant plants at auction he does it at his own risk, and should understand that the chances against him are great

#### LILIUM AURATUM-CATALPA.

Can *Lilium auratum* be successfully grown in a large pail or tub, which can be placed where it will be shaded in summer, and can be removed to the house in winter?

Can you, at the same time, give me any information as to the Japanese Hybrid *Catalpa*? It is claimed that it commences to bloom when only a few feet high, that it is perfectly hardy, stands our most severe northern winters, and grows twenty-five or thirty feet in four or five years. A tree which does all this seems a desirable tree to have.

W. S. TOWN.

An eight or ten-inch pot is large enough for *Lily*-growing. The instructions given in an article on this subject on page 5 of the January number of this MAGAZINE of this year, are so full and reliable we would call direct attention to it rather than to give advice briefly in this place.

We have no personal knowledge of the hybrid *Catalpa*, but the claims for it are made by reputable dealers, and we should expect them to be advanced in a spirit of fairness. We should be pleased to hear from any one who may have knowledge of it, regarding this new variety of *Catalpa*. We understand it to be a cross between *Catalpa speciosa* and *C. Kämpferi*.

#### BEGONIA-AZALEAS.

Is *Begonia argyrostigma picta* a winter-blooming plant?

Are the double Azaleas as free-flowering as the single?

MRS. M. A. FRYE.

The *Begonia* named blooms freely in winter, and is a fine variety for the purpose.

The double-flowered varieties of *Azalea* bloom equally as well as the single ones.

#### ROOT DIFFERENT FROM STEM.

On any wooded hill we can see roots which have been partially uncovered and exposed to the gradually washing down of the soil, in which the outer bark and wood is exactly similar to that of the trunk. But on cutting such a root through, no trace appears of pith—the relic of the ever advancing and ascending plumule.

W.

#### FLORAL GOSSIP.

I have been experimenting for some time back with the new insecticide, Fir tree oil, which was sent me for trial, with a strong endorsement from a New York city florist as to its merits as a destroyer of the mealy bug. I have given it a careful trial, not once, but many times, and I am pleased to say that it is by far the best of anything I have ever tried for clearing plants of this disagreeable pest. Indeed, it is the only thing which I have ever found which will kill it without injuring the plants. I have experimented with alcohol and kerosene, and always the young and tender growth was hurt by the application. But I have never applied this oil to any plant with similar results. Perhaps because I have used it cautiously, preferring to make the solution a little weaker than advised by the directions on the cans and apply it oftener, rather than run the risk of killing the new growth. I have but one plant which has been much infested with the mealy bug of late, a *Hoya*, just coming into bloom, and every cluster of buds was a lurking place for dozens of the wooly nuisances. I prepared some of the oil as directed, only, as I have said, making it weaker by adding more water, and this I applied liberally with a brush. I dropped the solution on to the clusters until I was certain that every portion of it was thoroughly saturated, treating buds in all stages of development alike. Some of these were just forming, and it seems that they ought to have been injured if the solution would injure anything; but I find, to-day, after a close examination, as I have found several times before after using the oil, that they are growing as if nothing had been done to them, while the bugs are dead. I have applied some to *Begonias* as a test of its strength, and I find that not a leaf shows a sign of injury. I think it is a safe and effective remedy for the mealy bug. Effective I know it to be, and, so far as my experience goes, harmless. The *Hoya* is always greatly troubled by the mealy bug in the greenhouse, and I know of several florists who have given up growing it because they could not get rid of its enemy, preferring to be without this delightful flower rather than keep it as a breeding place for the pest; but I think they will find Fir tree oil will enable them to grow it without further an-



noyance in this direction. If others have tried it, I would like to hear from them about their experience.

One of the most pleasing plants in my greenhouse just at present is a Myrtle of the communis variety. It is a large plant, thickly set with branches, and very symmetrical in shape, and every branch is well furnished with small white flowers. The plant is not grown for its flowers, but on account of its pretty, dark green, shining foliage; but it is really a fine blooming plant, if well taken care of, its flowers being freely produced each spring on young or old plants. But unless taken proper care of it does not always bloom, and I have been told by many who have specimens of it in their windows that they had never seen it in bloom, and were not aware that it ever flowered. It likes a rich soil. It must also have plenty of pot room, and never be allowed to get root-bound, or dry at the roots. It does not like a sunny window, and an exposure to the hot sunshine out of doors will almost always cause it to drop some of its leaves. It seems to do best in a compost similar to that which suits the Rose, made up of turfy matter, well rotted cow manure and loam. It requires considerable water when growing, but the pot should be given thorough drainage to prevent souring from stagnant water at the roots. Shift as soon as the pot becomes well filled with roots. Shower daily to keep it clean and prevent the red spider from getting a foothold. Scale often infests it on the stalk and leaf, and frequent examination should be made to see that this pest has not taken possession. If it has, wash the plant thoroughly, branch by branch, with soap-suds, rubbing the application into the bark with a tooth-brush, after which wash with clear water. As an ornamental plant, and for cutting for bouquet work, we have but few better than the Myrtle. But I do not think it possible to grow it well in a room heated by a hard coal base burner. I have lost two fine old plants by bringing them into the sitting-room. They would begin to drop their leaves in a day or two after being brought in. Removing them had no beneficial effect. The gas in the room seemed to have taken the life of the plant, and yet there was not enough of it to be perceptible to the occupants of the room.

I wonder why we do not see the *Rhynchospermum* in more collections. It is, to be sure, not a very showy plant, but it is wonderfully sweet, and it is pretty, too, in its modest fashion. It has pretty foliage of a rich, shining green, above which its small white flowers with twisted petals, something after the style of the Cyclamen, are borne in clusters. It is a vine, and can be trained up about the window, or over a trellis. It is very easily grown, and those who are familiar with its merits would not willingly be without it.

It is customary to put a coating of lime, thin paint, or something of that sort on the glass of the greenhouse, to shade the plants inside during the hot days of summer. It is never neatly done, and the effect is never pleasing. This year I have fitted thin muslin to the rafters. The upper end is fastened to the ridge by tacks. Wires are stretched along the rafters, and run down to the side of the house, and the strips of cloth are fastened to these wires by rings sewed on the edges. This admits of their being drawn up to the center of the house by a string which is fastened to the lower end of the strip and runs through a ring in the ridge at the top. When the sun shines too strongly the cloth can be pulled down, and a pleasant shade is secured. When the weather is cloudy, or early in the morning, the glass can be left unobscured. I like this much better than wash of any kind on the glass. The shade is pleasanter and more evenly distributed, and the cloth looks much better than any application to the glass, and when you have no further need of it it is an easy matter to take the cloth down, fold it, and put away for use another year, much easier than to go over the glass with a scrubbing brush, as you will have to do if you apply anything to it.

I always grow a good many plants for their foliage. It often happens that a plant has a pretty good show of flowers and but few leaves, and in order to display it satisfactorily you must use it in combination with other plants which have what this lacks. I make it a point to start at least half a dozen each of *Distinction*, *Happy Thought* and *Freak-of-Nature* Geraniums, quite early in the summer, so that I may have good specimens by winter time. I grow a good many of the *Madame Salleron*, also,



and I find these plants quite as useful as any which bloom. They can be used effectually in the greenhouse, or in the window garden, and as they are compact growers, they work in nicely in front of large plants where an edging is required, giving a cushion of foliage from which the larger ones seem to spring. By setting the pots containing them closely together the pots are completely hidden, and all you see is a mass of leaves. The four varieties mentioned are all very useful for this purpose. Last Easter a fine effect was produced by grouping Happy Thoughts about a large Calla in full bloom; about the Happy Thoughts was a row of Distinctions, with their pretty green leaves zoned with brown, and the table was edged with Madame Salleroi, whose pale leaves, marked with pure white, contrasted finely with the darker colors of the other plants. This last variety is very effective when used with some of the bright Coleuses. \*

#### COMPOST FOR ROSES.

The following description of a compost for Roses, by J. N. MAY, in a late number of the *American Florist*, is so explicit that it is worthy to be here reproduced:

The best soil for Roses is what is known by gardeners as a rich hazel loam of a moderately firm texture, and where this can be procured even at a little extra trouble, I would advise getting it by all means. Cut it with a spade, from three to nine inches thick, according to quality. Where it can be procured in the form of an old sod, clear of trees (as decaying leaf-mold is absolutely injurious to Roses; avoid such by all means), it is so much more valuable. In soil as described above, the roots of the grasses will form a dense fiber all through it, sometimes ten to twelve inches deep; where such is the case I would prefer to take the whole depth, and if a little inclined to be yellow clay at that depth, should consider it an improvement to add some to the compost.

Having selected the soil to use, the next thing required is well decomposed cow manure; this, if possible, should be at least one year old. If this is on hand, commence your compost heap, to every eight or nine loads of good loam adding one load of equal size of manure, and so continue till enough is collected for the

season's use. Where the soil is inclined to be heavy, add one part to ten of good sharp sand as you go along; let it lie a few days to get settled, and if inclined to heat, so much the better, as that helps to liberate the gases in the whole. Turn the whole over and beat it up fine with digging forks; if it is not considered rich enough, add a little pure ground bone as it is mixed to go into the houses, and you have a compost that will grow good Roses if judicious care is taken of the plants.

#### ONION AND RADISH MAGGOTS.

If you know what will kill the worms in Onions and Radishes, I wish you would let me know.

G. N. D., *Dykeman, N. Y.*

For Radishes select a piece of sandy land and cover it with about two inches of unleached wood ashes, and dig them in and sow the seed. In this way Radishes free from worms can be raised. Give the dressing of wood ashes every season before seed sowing.

The Onion maggot is more difficult to deal with. A dressing of salt and soot applied to the land before planting has been found useful. A few years since one of our correspondents gave an account of Onions raised by neighbors in two adjoining gardens. His own crop was wholly destroyed by maggots, and his neighbors', a few feet distant, were quite free from them. The neighbors' bed was covered with a coat of coal ashes after seed-sowing, and to this circumstance was attributed his success. Besides the substances already mentioned, lime and powdered charcoal have been used, dressing the land with them and dragging or raking in before sowing the seed. The management with a growing crop is to pull up every unthrifty or yellowish plant as soon as noticed and burn it up, in order to prevent the spread of the pest. A few years since, a method was given in our pages to destroy the maggots by watering the plants with saltpetre water; the saltpetre being first dissolved in some warm water, applying it at the rate of an ounce to a gallon of water. If any of our readers have tried this method, or have had experience in any way in combating this Onion bulb destroyer, we should be pleased to have them state their trials and results in our pages.

**DESTROYING ANTS.**

I would particularly like to know if you have a receipt or method for destroying black ants. A large nest of them is in my lawn, and two of them in my flower beds. I have tried numerous appliances that have been recommended to me, with the only apparent result of increasing them, boiling water, Paris green, slug shot, molasses, etc.

E. C.

We know of no better way to get rid of ants than to trap them. This can be done by taking some bits of coarse sponge and sprinkling sugar in their cavities, and laying them near the ants' runs. The ants will visit the sponges in considerable numbers, and some lady member of the family, who will give the matter attention, should visit the sponges occasionally and pick them up quickly and drop them into a dish of hot water carried for the purpose. If this course is persisted in the ants will all be caught and destroyed. Another way is to fill a few vials with sweet oil and sink them in the ground to the rim, leaving the mouth open. The ants like the oil and will sip it, but it destroys their capacity to breathe and they die of asphyxia. These two methods can be carried on at the same time.

**FLOWERS IN NEBRASKA.**

Seeing, last year, in this MAGAZINE, a request for information about the best flowers for the climate of Nebraska, I will give you the benefit of my experience as far as it goes. It is very difficult to make seeds come up here, on account of the extreme heat of the sun early in the season. The soil is light and rich, and dries out quickly, so that, even if the seed beds are liberally watered every evening, many of the small seeds fail to come up. I am fully convinced that in order to succeed in starting small seeds, there must be some arrangement for sheltering the beds from the hot sun and the strong, scorching south winds which sometimes prevail for several days before a rain. I am sure that flowers would do well here close to the north side of a building, for the morning and afternoon sun would be amply sufficient for them. Where the flowers are once well started they will thrive without protection, but the hot sun and wind make transplanting much more difficult here than in the east. I had used Vick's seeds many years in Ohio, and was usually obliged to thin out the rows, hence my failure here is not due to

lack of experience. Last year I sowed half of a packet of Verbenas in a box, about April 1st, and the remainder in the open ground a month later. I saved one plant from each sowing. This year, I sowed one packet in the open ground, about May 10th, and have twelve good plants.

Phlox, Petunias and Nasturtiums gave a profusion of rich blossoms, last year, all through the long, severe drouth which continued through July and August. Candytuft, Larkspurs and Pansies were in bloom when the drouth began, but the Pansies died, and the others ceased blooming. I have seen beautiful Pansies growing here close to the north side of a house.

Last year, also, I obtained but one plant from two packets of Portulaca seed. This year, our hot winds came soon after seed sowing time, and though I have had the hose spray from a large tank of water used thoroughly almost every evening, Pansies, Asperula, Golden Feverfew and Browallia have failed to come up, and also more than half the Phlox.

We are having heavy rains now and more plants may appear, but it is probable that the seeds germinated long ago and the plants were dried up before they reached the surface.

One Ricinus did well on the north side of the house, last year, and I think that a large cluster of them would probably do well without shelter. A single plant would be broken and the leaves torn by the wind. The American Ivy grows rapidly here, and all sorts of the Gourd family reach great size and perfection. Roses luxuriate in the rich, black prairie soil, and are not troubled by insects. Acres of wild Roses are in bloom now. I am sure, from what I have seen, that Carnations, also, do well here. Calliopsis grows wild in great profusion.

ANNAH B. MARSTON.

**THE APPLE CROP.**

The prospect for the Apple crop in this State is fair. Northern Spys, Greenings and Russets will give an average yield; that of the Baldwins will be light, and, as the orchards consist most largely of this variety, the whole average yield will probably be near half a crop. Of most other kinds of fruit there will probably be a good supply.



### FLORA'S FESTIVAL.

In the goodly far west land of Southern California, in the beautiful valley of San Bernardino, the months of March and April well deserves the name that stands at the head of my paper. In the cultivated gardens the blaze of color fairly dazzles the eyes, while the exquisite variety of perfumes bewitch the senses.

Here, one may see the English and French Honeysuckles twined together with Tecoma, Solanum Jasminoides and all the whole family of Climbing Roses in one conglomeration of color, sweetness and beauty. At one place in this vicinity I saw Cloth of Gold, Devonensis, Marechal Niel, Niphotos and Lamarque Roses mixed with four varieties of Honeysuckle, Jasmine and Solanum, all jumbled together in a wilderness of sweetness that I shall not easily forget, while the ground was covered with Mignonette, Violets and Oxalis mingled with tufts of Vincas, Callas and Amaryllis, all in their full glory, while huge shrubs of Roses were every where, of every sort, Hybrid Teas, Hybrid Perpetuals, Everblooming Teas, Noisettes, Fairy and Cluster Roses in almost endless number and variety, hundreds, thousands, millions of Roses of every hue, and darting from flower to flower could be seen gorgeous tinted butterflies and humming birds, flashing in the sun like resplendent gems, while the air is heavy with the perfume of the Orange blossoms. But you say, "this is the effect of cultivation, what has nature to contribute to this great feast?"

Let us take a walk down City Creek Wash. See, here is nature; pure and unadulterated. "Right here," a friend of mine in describing it, said, "Right here was where the world was finished, and all the chips, blocks and boulders were left scattered around in chaotic confusion." And right here, nature has scattered her gems and treasures broadcast; from where we stand, amongst the sand and boulders, we can count ten or twelve magnificent spikes of Yucca, from six to ten feet high, while the sand our feet rests upon is carpeted by a Tagetes that commences to flower before it is an inch high. That large, whitish bush, with the spikes of rosy-purple, is a Lupine, with an aroma almost equal to the Orange. Here the flowers of the wild Olive are almost hidden by the Clematis Virginiana,

which has completely covered the shrub. Yonder is a grand bed of Eschscholtzia, and, forming a grand background, a clump of bluish-purple, annual Lupines. Here is an herbaceous shrub with flowers something between a Cuphea and a Bouvardia, and here is another with flowers like a primrose-colored Gloxinia. Yonder is a clump of Calendulas of different markings and shades, and here is the vivid blue of the annual Larkspur, while further on the Lobelia cardinalis rears its spikes of coral bells, and we tread at every step on beautiful tufts of a pale pink Linum, while on each side of us tufts of Optunia, yellow, red and rose, invite us to prick our fingers to get their floral cups. Giant Sunflowers are everywhere, while here and there huge crimson spikes of wild Rhubarb invite our notice. Flowers everywhere, of every shape, size and color, while a few miles from us the mountains, at whose base we stand, are covered with snow. W. H. W.

### A NEW INDUSTRY.

The *Revue Horticole* gives an account of a use to which the common moss, Hypnum vulgare, has been applied. It is no less than that of the manufacture of carpets. It says that with this plant M. MOUVAULT, a young and very intelligent weaver, has lately made some carpets which, by their beauty and their solidity, are certainly called to play a very important role in domestic economy, and probably even in practical horticulture; this appears to be demonstrated by the different specimens which the inventor has presented.

### DOUBLE DWARF SCABIOUS.

These are valuable for winter blooming, and seeds can be sown this month, and the plants when large enough potted and grown on finely, occupying six or eight-inch pots. They can stand in the open air all summer, and be placed in a cold-frame in autumn until ready to be taken inside.

### AMERICAN APPLES IN ENGLAND.

According to the statement of English journals, the Apples received in England from this country, last year, sold for £700,000, or nearly \$3,500,000. Of this amount the Canadian fruit brought \$400,000.

**NATIVE CYPRIPIEDIUMS.**

The most showy of our native *Cypripediums* are the two species represented in our colored plate this month, the Large Yellow Lady's Slipper, *C. pubescens*, and the Showy Lady's Slipper, *C. spectabile*. Both of them are found in boggy and low grounds, but they are not wholly confined to such localities. HENRY BALDWIN, in his *Orchids of New England*, says of *C. pubescens*:

"I sometimes find this species under evergreens, but its preference is for Maples, Beeches and particularly Butternuts, and for sloping or hilly ground, and I always look with glad suspicion at a knoll covered with Ferns, Cohoshes and Trilliums, expecting to see a clump of this plant among them. Its sentinel habit of choosing 'sightly places' leads it to venture well up on mountain sides, and I am often startled when climbing a gloomy, moss-draped cliff by coming face to face with one of its colonies."

This agrees with our experience, and, in a few words, it may be said that this plant is found on low and on high ground, on moist and on dry, in warm and in cool places, but it seeks a little shade and shelter from other plants.

*C. spectabile* is found almost always in boggy or moist ground, slightly shaded. Some collectors have, however, found it on dry hillsides, growing in the shade of other plants.

Both of these species of Lady's Slipper succeed well in cultivation, if given a bed made of leaf-mold mixed with common soil in a shady place, such as is afforded by the north side of a house, and mixed in with Ferns or other shade-loving plants. As they are plants of so much beauty, it is worth some effort to raise them, though the most of this required is to procure and plant them in fall or early spring.

**PLANTS FROM SEED.**

Many of our western readers will be pleased with the communication in this department from ANNAH B. MARSTON in regard to raising plants from seed on the prairies west of the Mississippi. There can be no doubt that to be fairly successful in that region of country, where the sun is so powerful and hot winds frequent, that some kind of shelter is needed, both for seeds and transplanted

plants. A seed bed covered with the cheapest common unbleached cotton would be very beneficial. As soon as large enough the plants could be transplanted rather closely into another spot in the garden and given shade until established. After a fortnight in this position they would be strong enough to bear transplanting to the places where they are to remain, and this operation, under these circumstances, would be attended with but few losses, and a very slight shading, such as might be afforded by bits of paper for a day, would be all that is needed.

**THE SEED TRADE.**

The annual assembling of the American Seed Trade Association occurred on the 14th of last month, in Philadelphia. There was a large attendance, and many new members were admitted.

JAMES J. H. GREGORY, of Marblehead, Massachusetts, brought to the attention of the meeting some of the work done by State Experiment Stations in testing the germinating qualities of seeds, and asked that a committee of the Society be appointed to work in connection with the Stations. Mr. G. had given much attention and thought to this subject, and made it apparent to the members that the action he proposed was necessary in order that all interests involved should be fairly represented to the public. Such committee was appointed, with Mr. GREGORY as Chairman.

One of the members expressed the opinion that it would not be long before seeds, of some kinds, at least, would be graded according to their quality, those having the highest vitality selling at the highest price, and the lower grades at cheaper rates. At present, seeds of low quality are often offered and are sold at the same price as the best, the purchaser being ignorant of their value; or they are offered at a low price and their sale secured when the buyers would not take them at any price, if their real quality was known.

There was a long discussion in relation to the methods of improving the quality of seeds and of keeping them.

Mr. MEGGAT, of Wethersfield, Conn., was elected President for the ensuing year, in place of Mr. FOTLER, of Boston, who retired. Mr. McCULLOUGH, of Cin-



cinnati, Ohio, was re-elected Secretary and Treasurer.

On Thursday, the 16th, the last day of the meeting, the seedsmen of Philadelphia invited the members of the Association to a carriage drive through the Wisahickon and Fairmount Park, and in the evening gave them a banquet at the Belmont Mansion; their courtesies were highly appreciated, and will long be held in memory by those who enjoyed them.

Congratulations were exchanged with the Nurserymen's Association in session at Chicago.

The Association adjourned to meet in Chicago, next June.

#### BOUVARDIA VICTOR LEMOINE.

This double-flowered variety is a plant of thrifty, vigorous growth, and producing its large corymbs in great abundance.



The flowers are of a vivid scarlet color; very desirable for cutting for bouquets or personal adornment.

#### BAGGING GRAPES.

A one pound grocery bag, costing one dollar per thousand, will be found quite large enough for all but extra large bunches, when the bag is folded on the bunch, as is best, and not round the shoot from which the bunch issues. A large bag is less readily placed than a smaller one. With a sort of Grape that has long stems, narrow, pendent shoulders, or none at all, and that is trained so

that the bunches hang down clear of the wood, as in arbor or horizontal training when not crowded, it is a light, pleasant and speedy work to join on the bags through the single triangular fold, which is very easy to make proof against rain and insects, and easy to remove for taking out the ripe bunch for market or use. On a summer morning, in the healthful shade of Grape leaves, freely exhaling oxygen and grateful moisture, it is a choice occupation for deft fingers, this encasing of the beautiful thyrses of the vine as a means of securing them in full perfection for autumn and winter enjoyment. W.

#### MINNESOTA NOTES.

From the annual report of the Minnesota State Horticultural Society we make a few notes:

At the Carver County (Minnesota) Experiment Station, only one variety of Apple, out of sixty imported from Sweden, has proved hardy enough for the climate.

At the Experiment Station at St. Anthony Park, the following testimony is given to Russian Willows: *Salix fragilis*, Red Willow—This variety is said to take the place of Pine in many parts of Russia, the wood being light, strong and easily worked. It is a rapid grower, and is propagated easily from cuttings. The twigs are quite red in winter, whence the name. *Salix Napoleonis* is a drooping form of peculiar beauty. The leaves are small, linear, with a bluish-green color. The branches are very slender. It has not yet been grafted, but when a good stock is found we will have no "weeping" tree superior to it. Perfectly hardy and easily grown from cuttings.

M. PEARCE, of Minneapolis, says the most popular Grapes for that region are Concord, Delaware, Worden, Moore's Early and Cottage. The last two named are large and good, fifteen or twenty days earlier than the Concord.

Mr. SIAS thinks the Scotch Pine is about the poorest thing that can be planted for a wind-break in Minnesota. "What is wanted," he says, "for a wind-break is a tree that will stand firm, like the White Pine. We have a native evergreen that I think most of, known as Gray Pine. Some may be familiar with it, known as *Pinus Banksiana*."

J. S. HARRIS, of La Crescent, says of Strawberries: "The Crescent Seedling is a female, or imperfect flowering variety, but when properly fertilized is much more productive than any of the perfect flowering varieties. The plants are hardy and adapted to a great variety of soils. There is more money in the Crescent Seedling than any other variety that has been thoroughly tested. Next to the Crescent, upon strong soils, stands the Wilson, then Downer's Prolific. For a profitable plantation of Crescents, it is best to use two or more varieties for fertilizing, say the Old Iron-clad, Wilson, Captain Jack, James Vick, or Glendale. In making the plantation, I usually set one row of perfect flowering to three of Crescents.

#### WORK FOR THE MONTH.

There is a tendency to mow lawns too close, thereby lessening the future growth by reason of weakness of the plants. This is particularly noticeable at this season of the year when we are apt to have a dry time, and the sun strikes with full force upon the turf shorn of all shade. It is better to set the machine to cut higher and allow the grass to get up a little, looking all the greener.

Walks should be kept clean and their edges neatly trimmed.

Hybrid Perpetual Roses that have ceased blooming, can have their shoots shortened in to encourage a stronger growth for blooming later.

Tall-growing plants, like Dahlias, Tuberoses, Gladiolus, Lilies, &c., should be staked to prevent injury by the wind.

A great variety of the soft-wooded plants can be easily propagated by cuttings, this month, either in the cold-frame or in the open ground, shading a little when first inserted.

Pansy seed can be sowed any time this month for fall and spring blooming, shading the bed with evergreen boughs, cotton cloth, or a lath lattice screen.

Old Strawberry beds that have borne two years should now be cleared away. The runners from young plants that are beginning to form can be layered into pots, and will be sufficiently rooted to plant out next month.

Old Raspberry canes can be cut out, and of the new ones growing no more should be allowed to remain than are

wanted for fruiting the following season.

Promptly remove any blighted limbs or branches of Pear or Apple trees.

Sweet Corn and Beet seeds can be planted for succession crops. Cabbage, Cauliflower and Celery can now be set for late crops. The Cos varieties of Lettuce will do well in the warm weather and make fine heads the latter part of the season. Winter Radishes can be put in during the month. Turnip seed can be sowed any time during the month. It is a good second crop after early Peas, Potatoes, &c. For a winter fodder crop the Turnip is very valuable, and should be raised in large quantities. For this purpose sow the last of the month at the North, in milder climates later.

#### SOME STRAWBERRY NOTES.

In a small bed of several varieties of Strawberries we noted what we thought to be a few of the best. As the plants were young we could not in all cases judge of their vigor or productiveness.

Early Canada—Strong, thrifty plants, excellent foliage; fruit medium size, of fair quality, moderately prolific.

Henderson—Berries of good size and excellent quality.

Mrs. Garfield—Good, thrifty plant, good bearer; berries of medium to large size and good flavor.

Parry—Strong, healthy plants, yielding well; berries large, of fine quality, and good bright color.

Prince of Berries—Apparently not a thrifty grower; quality good.

#### AN OFFER TO NEW SUBSCRIBERS.

In order to increase the usefulness of the MAGAZINE, we make the following offer to new subscribers:

For one dollar and twenty-five cents, the annual subscription price, we will send the remaining numbers of this year, commencing with either July or August, and the whole of 1888. Our friends will please show this offer to their neighbors, and interest them in beautifying their homes and grounds.

We are very sure that many will avail themselves of this offer if they learn of it, and it only needs that our readers should bring it to the attention of their friends, and express their own good opinion of the MAGAZINE. Please act at once, and do not postpone.



# OUR YOUNG PEOPLE.

## A SUDDEN FLITTING.

"Do hurry in, Phil; did you get a letter, this morning?"

"No, a telegram. Father says Grandmother is no better, and they must stay a few days longer, if we are getting on all right. I answered that we are, and they needn't be anxious on our account."

"Poor Grandmother. I'm so sorry she isn't better. But, Phil, I'll own up, now; I'm just discouraged; you don't know any thing about my trials," and down bumped Mollie Steele into a chair, with her apron to her eyes, as she sobbed out—

"I've been trying to keep up my courage till father and mother get home, so none of you should ever know that I'm not half so plucky as you thought, nor half so good a housekeeper. But it's no use trying any longer; every thing goes wrong that I touch."

"Whew! Why, Mollie, I thought we were getting along splendidly. When Bridget got sick and left, we all agreed to turn in and help, and not worry mother by letting her know of it; and I'm sure we have. Katie wipes dishes and lays the table, and Charlie and I keep you in fuel and make the fires, strain the milk and put it away, sweep the kitchen and walks, besides scrubbing the porches and making our own bed. And there's Rolie, just a jolly plaything for us all."

"Yes, that's your side of it," retorted Mollie, as she threw her head up and her apron down. "I know you've all been as nice and helpful as you could be, but you haven't seen the bread I've had to throw away, because it was either burned or sodden, nor the streams of custard running out of the stove oven that ought to have staid in my pies, nor the loaf-cake that split through the center when I was taking it from the pan. And I haven't told you that the mysterious noise that waked us all up last night was the explosion of my yeast bottle in the back cellar. Old Mrs. Jones wanted me to try her old fashioned yeast, and told me to bottle it and tie in the cork. The bottle flew all to pieces and the yeast is

splashed all over those rows of cans this minute, except what went straight to the ceiling and stuck there. O, yes, you can afford to shout and laugh, I s'pose, but if you had to spend half a day down there, cleaning up the miserable muss, it wouldn't seem so funny. As for Rolie, he tears his clothes faster than I can mend them, and Charlie has teased him so much that he cries if he but touches him, unless you are around entertaining him. And this isn't one-half the troubles; but besides all the rest, that prim Miss Stebbins, must walk right into the kitchen this morning—to see how I get along, she said—and sat herself down and began to look around. Presently, she said:

"How very troublesome the spiders are in warm weather. They seem to delight in stringing their webs through every room in the house.' Of course, that was said to call my attention to that long web swinging over your head, there. I could have cried with vexation, but pretended not to notice it."

"O, bother the cob-webs," said Phillip, "that's because Charlie and I have done the sweeping. When I undertake to sweep the floor, I sweep it; I don't sweep the ceiling."

Up went the apron again. "I always knew that mothers were of the greatest importance in families, besides the loving part," sobbed Mollie, "but I didn't know that *everything* had to go wrong the minute they went away."

"O, see here; things aren't half so bad as you imagine. Any way, I've struck an idea. Listen. I read in one of our papers, a sketch by a man whose wife had got to burning her bread and breaking her dishes, and making mistakes generally, to her own great discomfort, when it suddenly dawned on her husband that she was needing a change in the hum-drum round of her daily duties—a break in the monotony of her life, you know. Of course, she said a change for her was impossible, unless he staid home to look after things, and she didn't care to go in



that way. So he hired a neighbor girl to look after the poultry, turned the pigs into the Red Clover field, loaned his cow and his two horses, and took his wife off for a long trip and a visit; and he said the money he spent while he was gone proved a good investment. Now, I think, you are needing a change badly, and I propose that we all pack up and go off for that fishing pic-nic that was promised us before the folks went away; I had the tackle all ready then."

"But Phil, you remember, we were to camp out and be gone three or four days, or longer, and father and mother were to be with us. And besides, what if they were to come home and find us three miles away?"

"They wouldn't care, if we were having the good time they had promised us. I'll take all the responsibility, so don't make any more objections, for I'm bound to go. The carry-all will take us and everything else we want to stow in it, and when the seats are removed, you, girls and Rollie can sleep in it as nicely as at home; yes, and cousin Mab, besides, if you'd like to have her along."

"O, lovely! wouldn't I, though? But she is so very timid, I don't believe she'd stay with us at night."

"Yes, she will; you'll see. Now I'll wash a ham and put on to boil, and then hurry off for lemons, cheese, crackers and things. We must be away by two o'clock."

"Two o'clock, *to-day*? and that cellar —."

"Yes, to-day. I want to get all fixed and settled to-night, so's to be out fishing early in the morning. Hallo, there, Charlie! come in here; we're off for a fishing frolic, camping out, and all that. Never mind tossing up your hat, but hurry up, double quick, and help get ready. First, take a pail of water and the step-ladder down cellar. Mollie's been amusing herself with domestic dynamite—tried to blow us all up, last night. Here, Katie, you get the dish-rag and help him clean up after her explosives."

"Katie," interposed Mollie, "tell Philip Steele we don't use a 'rag' for washing dishes, but a nicely hemmed cloth. Strange that boys will persist in using the coarsest names—."

"Never mind, now, I mean business."

Get something, Katie, and go on—we must all be busy. And you, Mollie, gather up the things we must take with us; you know what we had last year. Never mind about your dynamite bread—I'll buy bread. By the way, mother buys bread when she has no 'help'—don't see what makes you try to do everything Bridget does—you might know—there, there—I'm not scolding; no other girl could have done half as well as you have."

"Well, then, let me suggest, if you're determined to be off to-day, that the ham be cooked after we get there. We can be doing other things meanwhile, and that will be cold and firm by morning."

"That's so; you're a jewel—'two heads,' you know."

"Yes, and yours is the 'sheep-head.' But pray don't forget that you've assumed all the responsibility of this project."

"I won't. Here, Rollie, you're so fond of digging in the dirt, you can get us a quart or so of fish-worms. Pitch in, now, and let's see how many you'll get. Wouldn't you like to catch a fish yourself?"

For answer there was a "hoop-hurra" and a shout, while a pair of heels disappeared around the corner of the house.

One hour later it was found that the cow could not be satisfactorily disposed of, and so Charlie was started on ahead to drive that gentle bovine to the camping ground, where she was to be hopped mid patches of sweet wild grass, and milked semi-daily as her tribute toward the general perfection of all the arrangements. On his way, Charlie was to leave an invitation for cousin Mab to be ready to join the party soon to follow. So all was lovely thus far.

But another enigma confronted them. What was to be done with their mother's pot plants? Such plants as they were, too!—Pine-apple plants rooted from the crowns of the fruit used in the family—plants grown from the seeds of Prunes and Dates planted by herself, and Rice, Cotton, Tea and Tobacco plants. The weather was very dry and they would need water each day. At length Phillip declared that he could water them upon the principle of capillary attraction. Filling a tub of water in the wood-shed, he ranged the pots around it, and dropped into each saucer one end of a wet, fluffy



cord and the other end into the tub, leaving the cord long enough to lie in the water as it should lower.

When the remaining less troublesome matters were arranged, and the packing all done, the house was securely closed, and the little party started off with long, restful inspirations of relief and satisfaction.

Cousin Mab, all ready, greeted them at the gate as they drove up, and her father joining them, promised to call at their camp next day with a well laden hamper.

Charlie was so near the camping ground when the others overtook him that he declined to change places with Phillip, and soon after they were all chattering merrily together near the elevation chosen as headquarters. Daisy, the cow, meekly waving her ears in listening attitude, as though ready to acquiesce in any arrangement proposed. She knew their voices and faces as well as they knew each other, and felt such security in their presence that she was soon contentedly cropping the grass mid her new surroundings.

Such confidence and gentleness displayed by our dumb creatures is the result of uniform kind treatment, and is surely a pleasing return.

Then followed a busy, bustling time getting settled, and finally the early night hours found them with their tent pitched, their ham boiled, their cow milked, their supper eaten, and their weary limbs rest-

ing in slumber, when a piercing scream from Mab, and the heavy leaping of some large creature near by, roused the little camp in the greatest excitement and terror. But the mystery was soon solved, and poor Daisy was soon tethered to a tree, with the promise of an extension of her hopple another night to her horns, so that her sociable tendencies should not let her go prying through loose curtains into ladies' sleeping apartments.

"Indeed," declared Mab, "I thought I should die with fright when I felt her nose rubbing over my face." And no wonder, thought they all.

Telegrams are not always on time. Phillip's was twenty-four hours old when received, and the grandmother's critical condition having suddenly improved, his parents were already on their way home. Arriving there at midnight, and not wishing to disturb their sleeping children, they quietly effected an entrance, planning a grand surprise for the breakfast table. But the surprise being quite the other way, the early morning found two hungry mortals inquiring of neighbors for news of their missing family.

Happily, Mab's father, making an early trip, bore off the hapless pair to his own home, with difficulty disguising his amusement at the situation. A little later in the day the uncle, aunt and parents alighted at the camp amid the shouts and cheers and happy greetings of the delighted runaways.

MARIA BARRETT BUTLER.

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## FOXES.

Sly, cunning creatures are foxes, and these unenviable qualities are always spoken of as belonging especially to them, perhaps more so than to any other animal, and who has not heard the expression used many a time, "sly as a fox."

They are very widely distributed over the globe, and there are many species, all, however, are nocturnal animals, and their eyes for this reason are peculiarly constructed. Their heads are rather round in shape, with very pointed muzzles, short, triangular ears, slender limbs and bushy tails. Their homes are burrows which they make in the earth, or if they are so fortunate as to find one

which has already been made by some of their fellow creatures, they very gladly take possession of it and appropriate it to their own use. Some feed on small animals, birds or eggs, and if they can by any means make their way into a hen-roost, it is their delight to carry away from it the fattest and finest fowls they can find. Others feast on fruit, berries and vegetables.

The color of the common fox of England, is a red-brown above and white beneath, the outside of the ears black, and the legs almost entirely black, and the end of the tail is white. Their senses of seeing, hearing and smelling are very keen.







The black fox of Asia is entirely jet black, except the tip of the tail, which is white. The fur is considered valuable. There is also the red fox of North America, similar to the common fox of Europe, but of larger size. The fur is finer, more brilliantly colored, and highly valued as an article of commerce. Then there is still another species, the arctic fox, a native of the northern parts of Europe, Asia and America. It is smaller than the common fox, has thick, woolly fur, even the soles of the feet being covered with it; the tail is bushy. In very cold climates its color in winter is snow white, but in summer changes to a bluish or brown

hue. It is far less cunning than the common fox.

Fox-hunting is, with many, a favorite pastime, and for it certain kinds of dogs are used, called fox-hounds, which are trained for the purpose, and are remarkable for their speed and perseverance in the chase.

The cunning of the fox is often shown when trying to escape the hounds, by its running along the rails of a fence and causing the dogs to loose the scent. Thus the trait for which it is so noted does it good service in helping it to escape from its enemies.

M. E. WHITTEMORE.

## EDITOR'S MISCELLANY.

### AMERICAN POMOLOGICAL SOCIETY.

As announced last month, this society will meet in Boston on the fourteenth day of September next. The following subjects have been suggested for general discussion as time may be secured:

1. Discussion on New Fruits.
2. Migration of Fruits.
3. Honesty in Testimonials and Recommendations.
4. Hardiness of Fruits—Causes and Experience.
5. Behavior of Fruits at Various Altitudes.
6. Commercial Fertilizers as Affecting Quality.
7. Fruit Breeding and Seed Extinction.
8. Some of our Most Promising Wild Fruits.
9. Testimony Concerning Peach Yellows.
10. Testimony Concerning Apple Scab.
11. Climate as Affecting Color in Fruits.
12. Possibilities of Small Fruits with Water.
13. Progress of Fruit Identification by Flowers.
14. Progress of Improved Nomenclature; Our Duty.
15. Relation of Forest Destruction to Fruit Deterioration.
16. Relation of Soil Starving to Fruit Deterioration.

The following special prizes are offered by the Massachusetts Horticultural Society in view of the meeting of the American Pomological Society, in connection with the Annual Exhibition of the Massachusetts Horticultural Society in September, 1887. Competition is open to states, societies, granges, firms, and individuals throughout the United States and Canada; but no party competing for the prize for the General Display can compete for either of the other prizes with the same varieties. Of Apples, Pears, and Peaches, six specimens of each variety are to be exhibited; Plums, twelve specimens; Grapes, three bunches; of sub-tropical fruits the number of specimens is left to exhibitors. No variety can be duplicated in any collection. Prizes or honorable mention will be given to objects of special merit:

For the best general display of fruits of all kinds, three prizes, \$100, \$50, \$25.

For the best collection of Apples, three prizes, \$25, \$15, \$10.

For the best collection of Russian Apples and crosses and other seedlings therefrom, the parentage to be stated so far as known, three prizes, \$20, \$15, \$10.

For the best collection of Pears, three prizes, \$25, \$15, \$10.

For the best collection of Peaches, three prizes, \$25, \$15, \$10.

For the best collection of Plums, two prizes, \$25, \$15.

For the best collection of Native Grapes, three prizes, \$25, \$15, \$10.

For the best collection of sub-tropical fruits, two prizes, \$25, \$15.

It is expected these prizes will bring out a magnificent display of fruits. Packages should be addressed to E. W. Wood, at the Massachusetts Charitable Mechanics' Association Building, Boston, Mass.

### BOTANICAL BULLETIN.

We acknowledge the receipt of the Bulletin from the botanical department of the Iowa College, prepared by Byron D. Halsted, Sc. D., Professor of Botany. This bulletin recounts the work done and the results obtained by the students in the botanical department of the college for the year 1886. It is very apparent that botanical science is given a fair show at this institution, and we believe much credit is due to Dr. Halsted for this attention to the study. We can congratulate Dr. H. on his success in interesting the students in this science, and also for the happy faculty he has of writing up his "Bulletin" so as to make it pleasing reading from beginning to end, as it is in the present instance. The notes on rusts, mildew, and other fungi are particularly valuable.

### NEW YORK STATE FAIR.

The proposed permanent location of the fair of the New York State Agricultural Society, we think, would be a mistake if decided upon. An attendance upon the exhibitions of this society covering the space of forty years, leads us to think that the holding of its shows yearly at the same place would with certainty localize the fair, and loosen its hold upon the citizens of the more distant parts of the State. And this we believe to be true of State fairs in all parts of the country. There is much to be said in favor of a permanent location, and yet there are advantages in changing about from year to year that can be had in no other way. Holding the fair in successive rotation at three or four of the most favorable points we believe is the method that offers the greatest usefulness to the fair and will most surely make it successful.